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United States  
Department of  
Agriculture

Natural  
Resources  
Conservation  
Service

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# National Handbook of Conservation Practices

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## Chapter 1

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# General Conservation Practice Standards Information

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# Chapter 1

# General Conservation Practice Standards Information

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## Preface

The National Handbook of Conservation Practices (NHCP) establishes U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) National standards for conservation practices commonly used to improve natural resources with respect to soil, water, air, plants, and animals plus humans (SWAPA+H). National conservation practice standards can be used within a State without modification, or they can be rewritten to include additional requirements to meet State or local needs. Because of wide variations in soils, climate, and topography, States may need to add special provisions or provide additional details in the conservation practice standard. State laws and local ordinances or regulations may dictate more stringent criteria. As a minimum, all practice standards adopted for use in a State will contain the name or abbreviation of the State in the footer of the standard. These revised local standards are to be equal to or more rigorous than the national standard. Conservation practice standards are located in section IV of the Field Office Technical Guide (FOTG).

NRCS is the lead USDA agency for providing conservation technical assistance and planning on privately owned lands. Various Federal, State, and local laws passed during the last several years have increased cooperation between NRCS and its partners that are concerned with conservation and protection of natural resources. Other government and private organizations use NRCS' FOTG material to assist or supplement their conservation efforts.

Conservation practice standards in the NHCP evolved in accordance with advancement in farming and ranching techniques used throughout the world and with changes in technology as documented by research, conservation field trials, and accumulated experience. Conservation practice standards, the associated conservation practice physical effects (CPPE) matrix, and other associated documents will be reviewed and maintained periodically to stay current with changes in technology and to ensure that they address multiple resources. Reviews ensure that standards:

- provide timely incorporation of new technologies
- address multiple resource concerns
- are consistent in format and content

- enhance interagency cooperation with regard to development of conservation practice standards
- account for the varied conservation activities expected of NRCS in the future

The guidelines outlined in the NHCP for developing practice standards will result in multidisciplinary contributions during the standards development process. As outlined in the General Manual (GM) 450 Part 401 Subpart A, B, or C, all NRCS employees are responsible for assuring that conservation practices include up-to-date information and technology. National policy and the conservation practice standards are developed for the protection of the resources, landowner, conservation contractors, Soil and Water Conservation District (SWCD) employees, and NRCS employees. When a conservation practice is installed according to criteria specified in the conservation practice standard:

- Landowners receive a conservation product that addresses or mitigates the identified resource concern.
- Contractors and/or technical service providers understand their responsibility to provide a quality job product on the ground and are not required to warranty a product beyond the requirements of the standard.
- NRCS is protected by being assured that its employees are working within the scope of their employment.

The NHCP contains current national conservation practice standards. The NHCP also contains guidance and direction on maintaining conservation practice standards, offers several methods for obtaining the standards, and encourages involvement in the process to develop new or revise current Conservation practice standards. NHCP exhibits 1 through 7 in this handbook provide additional information and guidance to the policies and procedures outlined in GM 450 Part 401 Subpart B.

Although the handbook is prepared primarily for use by NRCS personnel, the handbook is available for anyone having an interest in or a responsibility for conservation of natural resources.

## NHCP Exhibit 1–1 Documentation Files

A documentation file will be maintained on each national conservation practice standard by the national discipline leader listed in the table of contents of the NHCP. The file defines what is in the standard, why and how the technology became a part of the standard, and rationale for each criterion and consideration. Documentation will include a history of the conservation practice standard's development and will contain each of the following sections, if appropriate.

The documentation file is created and maintained under the responsibility of the national discipline leader for each of the conservation practice standards. The national discipline leader maintains the file at National Headquarters or at the location of the national discipline leader. The documentation file will be available to States upon request.

States are to maintain documentation files on conservation practice standards where the State adds criteria to the standard or makes criteria more stringent than the national criteria.

**Brief history of the development of the conservation practice standard**—A history of the conservation practice standard should be able to address any questions raised by the public and NRCS partners concerning the science and rationale used in the national conservation practice standards.

**Rationale behind each requirement in the criteria section of the standard**—This is a short narrative statement used to justify the selection of a particular value or decisive factors for each criterion. The narrative statement provides additional information helpful to users of the conservation practice standard by providing a log of past decisions or changes to the criteria as well as any clarifications concerning the technology.

**Documentation needed for the items listed in the consideration section of the standard**—Documentation should include rationale for including each consideration and justify the item as a consideration, rather than as criteria.

**Summary of the changes, if any, from each previous revision of the standard**—All meaningful comments received during the review process are listed, and the disposition of the comments is documented (why the comments were or were not incorporated into the conservation practice standard).

**Technical sources and appropriate literature used in addition to those cited in the standard**—Sources listed will document or clarify the rationale or criteria used in the standard.

## NHCP Exhibit 1–2 Interim Conservation Practice Standards

Interim conservation practice standards are prepared by the States to address natural resource concerns for which there is no existing conservation practice standard, or to enable the use of new technology where existing standards cannot be revised to include this new technology. An interim conservation practice standard can also be used to field test new technologies.

Development of an interim conservation practice standard and the evaluation of that technology in the field will result in one of the following:

- a new national conservation practice standard
- tested technology incorporated into an existing conservation practice standard
- a decision that the new technology is not considered useable or appropriate and to discard the interim conservation practice standard

Interim conservation practice standards are issued for a period not to exceed 3 years. The 3-year policy allows for adequate time to review and evaluate a new technology or procedure. Extensions to the 3-year time limit should only be made when data are insufficient to make a final technical evaluation. The need for the extension is documented within the evaluation report.

The following method will be used to develop Interim Conservation practice standards (see 450 GM 401.17):

*Step 1* The State discipline specialist is responsible for developing Interim standards based on requests from the State university, Agricultural Research Service (ARS), a landowner, an industry representative, employees at the field office, or other such sources. The format of a State interim standard is the same as that used for national conservation practice standards.

*Step 2* After approval by the State technical guide committee, the State conservationist will submit a copy of the proposed interim conservation practice standard, prepared by the discipline specialist, to the chair of the national conservation practice standards subcommittee (NCPSS) to request a practice code number and use approval. National level review consists of referring this interim conservation practice standard to the appropriate national discipline leader who will assure that the request cannot be addressed through an existing practice standard. If the request cannot be addressed through an existing conservation practice standard, a national practice code number (700 series) is assigned to the interim conservation practice standard.

*Step 3* Once the practice code number is received, the State conservationist will direct the State discipline specialist to oversee use and evaluation of the interim standard.

*Step 4* The State discipline specialist will prepare an annual written evaluation of the interim conservation practice. At the end of the 3-year evaluation period, a final evaluation report is completed with specific disposition recommendations. The evaluation report should include the following as a minimum: name of the conservation practice, standard code, original justification for the interim standard, number of times practice was used, written evaluation of continuing need, discuss environmental impacts and

**NHCP Exhibit 1–2 Interim Conservation Practice Standards—Continued**

if there is a better way to accomplish the practice, and recommended disposition (either a new national conservation practice standard; incorporation into existing standard; or discontinuation). The report is provided to the national technical guide committee through the chair of the NCPSS. If the interim conservation practice standard is recommended as a national standard, the State interim conservation practice standard may be used until the national conservation practice standard is issued. If there is no evaluation report or the interim technology is found unacceptable or unneeded as a national conservation practice standard, the interim conservation practice standard is to be removed from the FOTG and the conservation practice standards (CPS) database.

All interim conservation practice standards are posted to the conservation practice Web site (<http://www.nrcs.usda.gov/Technical/Standards/>) to allow states to view what new technology is being used throughout the country. The annual evaluation reviews are included with each State Interim Conservation practice standard to provide information to others on the progress of evaluating this new technology.

The interim standards Web site is arranged into folders that house each interim practice code. The State interim conservation practice standards using that practice code are posted in the folder. The annual evaluation report for each State interim conservation practice standard is also posted in that folder.



**NHCP Exhibit 1–3 Practice Standard Template****NATURAL RESOURCES CONSERVATION SERVICE  
CONSERVATION PRACTICE STANDARD****NAME, (UNITS)**

*Established nationally and not to be altered or supplemented by states.*

**Code (code #)**

*Established nationally and not to be altered or supplemented by states.*

**PHOTO** [optional]**DEFINITION**

Established nationally and not to be altered or supplemented by states. The definition briefly describes the conservation practice and/or the technology delivered by the conservation practice.

**PURPOSE (S)**

The primary conservation objectives for which the conservation practice is applied are listed here. Purposes must relate to resource concerns that can be addressed by the technology in the conservation practice standard.

Each purpose must be supported by appropriate criteria in the **CRITERIA** section. States may add a purpose by requesting a variance as outlined in GM 450 Subpart B section 401.16. States may delete any purpose that addresses a resource concern that has not been identified in that State.

**CONDITIONS WHERE PRACTICE APPLIES**

The land uses and/or site conditions that affect suitability or function of the practice are described.

**CRITERIA**

Criteria must be presented for each **PURPOSE** indicated above. As a minimum, a **General Criteria** statement that is applicable to all purposes is used. Additional criteria for some or all of the purposes may be needed if there are design elements that

apply only to that purpose. The **CRITERIA** section shall include important design elements about which decisions must be made, including any necessary minimum and maximum limits.

Design tools and procedures are not to be included, but can be referenced. Copies of such references are to be maintained at a designated filing location. These references are generally listed in the **REFERENCES** section.

Long lists, such as seeding information, should be referenced. Other conservation practice standards may be referenced in the criteria section if they have design procedures or technologies that are applicable.

**CONSIDERATIONS**

Additional details that could enhance application for both primary and secondary conservation benefits should be identified and brought to the planner's attention in this section of the standard. Secondary purposes or incidental benefits are listed in this section. An example would be delaying field operations until after the spring hatch for wildlife benefits. **CONSIDERATIONS** is the one section of the standard that contains information that is optional to the designer.

**PLANS AND SPECIFICATIONS**

This section lists information that needs to be in the plans and for the conservation practice to

**NHCP Exhibit 1–3 Practice Standard Template—Continued**

ensure that the technology in the practice standard is properly applied in the field. Plans and specifications include construction plans, drawings, job sheets, or other similar documents. The documents are to specify the requirements for installing the practice, such as the kind, amount, or quality of materials to be used, or timing or sequence of installation activities.

Items listed in this section carry the same weight as criteria, meaning they must be followed. States may not delete any of these items, or make them less stringent than the national conservation practice standard.

**OPERATION AND MAINTENANCE**

Include required management actions and corrective actions that contribute to the longevity and functioning of the conservation practice. Operation encompasses normal management actions, such as mowing

for weed control, periodic opening and closing of water supply gates, and other similar actions. Maintenance involves corrective actions, such as needed repairs due to normal wear and tear, replacement of conservation practice components at periodic intervals during the life of the practice, and other similar activities.

Items listed in this section carry the same weight as criteria, meaning they must be followed. States may not delete any of these items, or make them less stringent than the national conservation practice standard.

**REFERENCES**

Technical references that are the source of or support the technology in the standard are listed here. The list shall be as short as possible.

Conservation practice standards are reviewed periodically and updated if needed. To obtain the latest version of this standard, visit the Field Office Technical Guide for your state at <http://www.nrcs.usda.gov/technical/efotg>

**NHCP Exhibit 1–4 Federal Register Letter****DEPARTMENT OF AGRICULTURE****Natural Resources Conservation Service****Notice of Proposed Change to Section IV of the [name of State] State Technical Guide**

**AGENCY:** Natural Resources Conservation Service (NRCS), U.S. Department of Agriculture

**ACTION:** Notice of availability of proposed changes in the [name of State] NRCS State Technical Guide for review and comment.

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**SUMMARY:** It has been determined by the NRCS State Conservationist for [name of State] that changes must be made in the NRCS State Technical Guide specifically in practice standard [number and name of practice standard, such as, #345, Residue and Tillage Management, mulch till] to account for improved technology. This practice can be used in systems that [insert purpose of systems, such as, “treat highly erodible land”]. [Insert other information if needed.]

**DATES:** Comments will be received for a 30-day period commencing with this date of publication.

**FOR FURTHER INFORMATION CONTACT:** [insert name], State Conservationist, Natural Resources Conservation Service, [insert mailing address of office]; [insert telephone number]; [insert fax number].

**SUPPLEMENTARY INFORMATION:** Section 343 of the Federal Agriculture Improvement and Reform Act of 1996 states that revisions made after enactment of the law to NRCS State technical guides used to carry out highly erodible land and wetland provisions of the law shall be made available for public review and comment. For the next 30 days the NRCS will receive comments relative to the proposed changes. Following that period a determination will be made by the NRCS regarding disposition of those comments and a final determination of change will be made to the subject standard(s).

Dated:

[Insert name]

*State Conservationist*

## NHCP Exhibit 1–5 Developing and Revising NRCS National Conservation Practice Standards

*Step 1* Development is initiated by the national discipline lead(s) assigning responsibility for development/review of a conservation practice standard to a team leader within NRCS from the National Technology Support Centers (NTSCs) or states. The team leader will confer with the national discipline leader on the creation of an interdisciplinary team to develop/review the standard.

*Step 2* The Interdisciplinary Development Team receives input information and prepares draft 1. If draft 1 is a minor revision to an existing conservation practice standard, it may be submitted to the national discipline leader for release. Otherwise, draft 1 is posted to the FTP server for review and comment.

*Step 3* Draft 1 is posted to the FTP server on the 15th day of the month that it is available for review. It remains on the server until the end of the following month. All NRCS employees can access the posted standard and post their comments directly to the FTP server; however, states are encouraged to consolidate their comments through the appropriate State discipline leader. All of the comments are available for review.

*Step 4* The Interdisciplinary Development Team downloads the comments from the FTP server and prepares draft 2. If the Interdisciplinary Development Team and the national discipline leader consider draft 2 an acceptable conservation practice standard, the conservation practice standard is forwarded to the national discipline leader for approval. If significant revisions were made to draft 1 and it is believed that another review and comment period is needed, draft 2 is posted to the FTP server.

*Step 5* Draft 2 is posted to the FTP server on the 15th day of the month that it is available for review. It remains on the server, available for comment, until the end of the following month.

*Step 6* The Interdisciplinary Development Team downloads the comments from the FTP server and prepares draft 3. Draft 3 is the last draft prepared by the Interdisciplinary Development Team. If draft 3 is considered a final product, it is submitted to the national discipline leader for approval. If outstanding comments and issues are not resolved, draft 3 is submitted to the national discipline leader as a working draft with a description of the outstanding issues.

*Step 7* For conservation practice standards submitted to National Headquarters (NHQ) with unresolved issues, the national discipline leader resolves the outstanding issues with other discipline leaders and prepares draft 4.

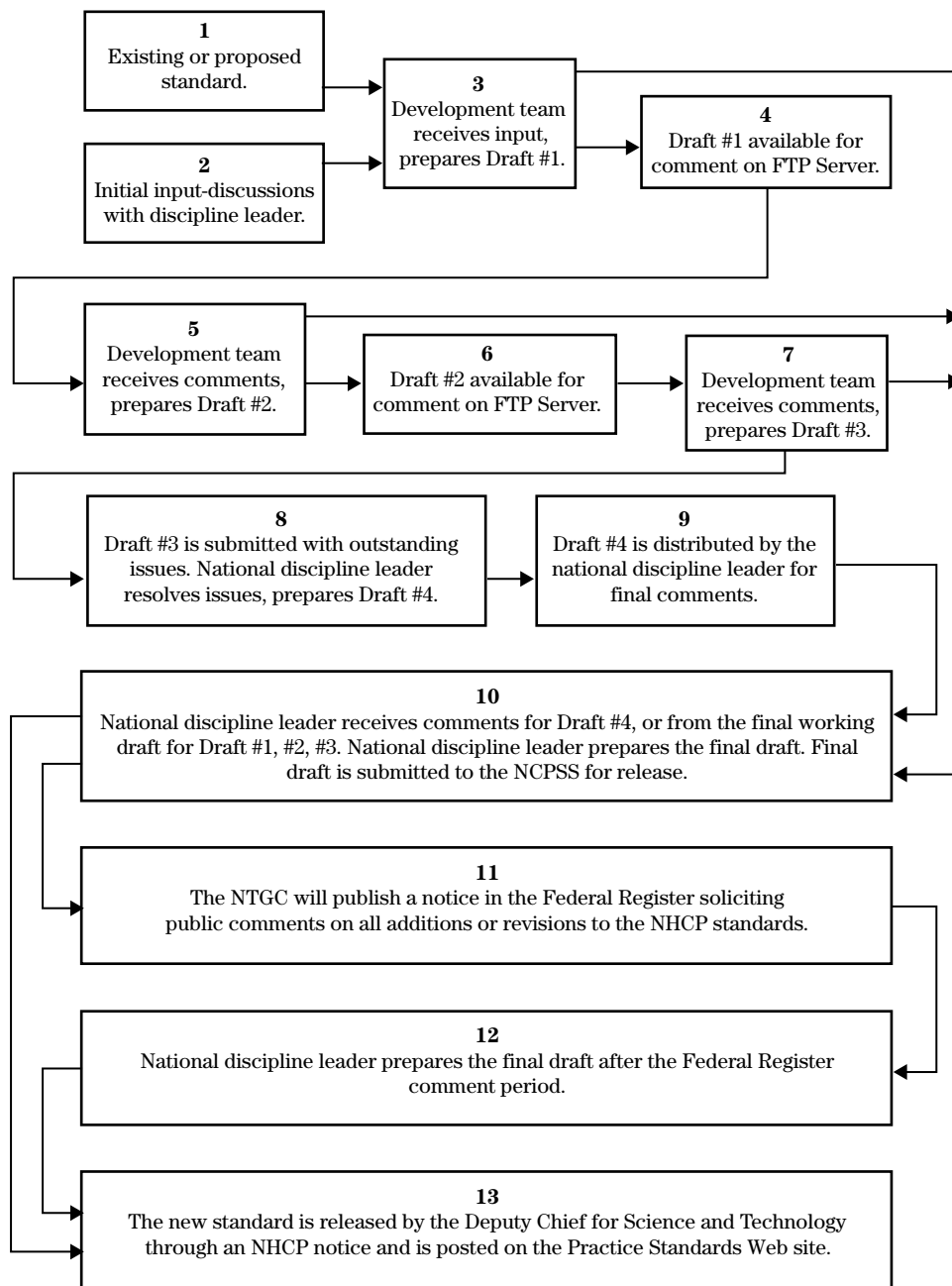
*Step 8* Draft 4 is distributed among the other discipline leaders at NHQ for final comment.

*Step 9* The national discipline leader receives the final working draft for draft 1, 2, or 3, or completes draft 4. The final draft is submitted to the national conservation practice standard subcommittee (NCPSS) for release.

*Step 10* The final draft goes through the Federal Register notification process to solicit comment from our partners and customers.

*Step 11* If there are comments that warrant change to the standard, the national discipline leader prepares the final national conservation practice standard. The conservation practices standard is submitted to the Deputy Chief for Science and Technology for release.

*Step 12* The completed conservation practice standard is released and sent to all states by issuing an NHCP Notice. The notice and practice standard are posted on the Internet.

**Process for Developing and Revising NRCS National Conservation Practice Standards**

## NHCP Exhibit 1–6 Development Team Procedure

### *Step 1* Selection and responsibilities of conservation practice standard team leader

A conservation practice standard team leader (CPSTL) is recruited by the national discipline leader(s) with responsibilities for the conservation practice standard. A team leader may also be a volunteer from an NTSC or from National Headquarters that is developing a new conservation practice standard or revising an existing one. CPSTLs for each conservation practice should form a working group. The working group should be interdisciplinary and form a broad geographic area to ensure that the conservation practice standard is compatible across disciplines and truly national in scope. CPSTLs should contact the national discipline leader assigned for that conservation practice standard and their NCPSS regional representative for guidance. National discipline leaders for each conservation practice are listed in the index to the National Handbook of Conservation Practices. Normally, the current national conservation practice standard is the starting point to revise the standard. Then the team should develop a timeline for the development of the draft conservation practice standard (steps 4, 5 and 6 give an indication of how long the review process might take).

### *Step 2* Formatting national conservation practice standards

The purpose of updating conservation practice standards is to incorporate new technology that has become available since the current standard was written and to change obsolete or dated terminology. The format for national conservation practice standards is given in NHCP exhibit 3. This formatting can be accomplished by attaching the nhcp.doc template to the document. This template is available at: <ftp://ftp-fc.sc.egov.usda.gov/NHQ/practice-standards/templates>.

### *Step 3* First draft

The working group prepares the first draft of the conservation practice standard and sends it to the practice standards review coordinator (PSRC). This can be accomplished by attaching the document to an e-mail. The coordinator holds all drafts and posts them for review at the appropriate time.

### *Step 4* Posting draft standards

Draft standards are posted to the FTP server on or about the 15th of each month at: <ftp://ftp-fc.sc.egov.usda.gov/NHQ/practice-standards/standard-development/draft>.

After the draft standards are posted, a message is sent to the NHCP mailing list to notify all states that they are available for review. The review period is usually 45 days (from posting date to the end of the following month). Because “anonymous” users can no longer place files on the FTP server, comment files should be attached to an email and sent to: <mailto:psrc@ftw.usda.gov>.

Each State or other administrative unit is encouraged to consolidate all of the comments from that State or unit to resolve any conflicting comments and to reduce the total number of comments that the team leader must review.

The PSRC will post the comment files on the FTP server to make them available to everyone. The comment files may be found at: <ftp://ftp-fc.sc.egov.usda.gov/NHQ/practice-standards/standard-development/review> in the appropriate subfolder. All comments are archived for future reference. These archived comments may be found at: <ftp://ftp-fc.sc.egov.usda.gov/NHQ/practice-standards/archive/review-comments>.

**NHCP Exhibit 1–6    Development Team Procedure—Continued***Step 5    Review first draft comments*

At the end of the review period, the CPSTL can download the comments from the FTP server, distribute them to the team, and begin work on the next draft, if needed. If problems are encountered during uploading or downloading files to the server, contact the PSRC. Reviewers will include their name, telephone number, and e-mail address, along with their comments. This allows the development team to contact them directly, if needed, to clarify any comments.

*Step 6    Repeat process, if needed*

The process repeats itself until the development team feels they have a final product. The National Practice Standards Subcommittee believes that three draft and review cycles should provide sufficient opportunity for everyone to have input. In some situations, one or two reviews may produce a final product, and in others, more than three cycles may be required. Indications that this process is nearly complete are when very few comments are received on a draft or when only minor or editorial changes are suggested in the comments received.

*Step 7    Final draft*

The final draft is sent to the PSRC. The PSRC forwards it to the national discipline leader and the chair of the National Practice Standards Subcommittee. They do a final review and post the appropriate notice in the Federal Register.

Contact information for the PSRC:

Practice Standards Review Coordinator  
USDA-NRCS  
P.O. Box 6567  
Fort Worth, TX 76115  
Telephone: 817–509–3363  
Fax: 817–509–3469

Mail to: *psrc@ftw.usda.gov*